| Examiner-Initiated Interview Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 08/653,294 | CLAYBERGER ET AL. | |
| | Examiner | Art Unit | |
| | DiBrino Marianne | 1644 | |

**All Participants:**

(1) *DiBrino Marianne*.

(2) *Hill, Laurie*.

**Status of Application:** *Allowed*

(3) _____.

(4) _____.

**Date of Interview:** *9 June 2005*, 7 June 2005 & 23 May 2005. **Time:** _____

**Type of Interview:**
- ☒ Telephonic
- ☐ Video Conference
- ☐ Personal (Copy given to: ☐ Applicant ☐ Applicant's representative)

Exhibit Shown or Demonstrated: ☐ Yes ☒ No
If Yes, provide a brief description:

**Part I.**

Rejection(s) discussed:

Claims discussed:
*Applicant agreed to the claim amendments detailed in the accompanying Examiner's Amendment.*

Prior art documents discussed:
*See Continuation Sheet*

**Part II.**

SUBSTANCE OF INTERVIEW DESCRIBING THE GENERAL NATURE OF WHAT WAS DISCUSSED:

**Part III.**

☒ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview directly resulted in the allowance of the application. The examiner will provide a written summary of the substance of the interview in the Notice of Allowability.

☐ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview did not result in resolution of all issues. A brief summary by the examiner appears in Part II above.

Marianne D

(Examiner/SPE Signature)

(Applicant/Applicant's Representative Signature – if appropriate)

Continuation of Identification of prior art discussed: Potential rejection of claims 39 and 40 under 35 USC 102(b) as anticipated by WO 95/13288 A1, as SEQ ID NO: 36 of the instant application is taught by the art reference on page 12 at line 29. Applicant agreed to delete SEQ ID NO: 36 from claim 39 and to cancel claim 40, which is drawn to SEQ ID NO: 36.

UNITED STATES
PATENT AND
TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
WWW.USPTO.GOV

DATE: 5/23/05

FROM: Dr. Marianne DiBerto

PAGES, INCLUDING COVERSHEET: 3

PHONE NUMBER: 1-571-272-0842

FAX/TELECOPIER NUMBER: ~~(703) 30-~~

TO: Dr. Laurie Hill.

FIRM: Morrison & Foerster, LLP

SERIAL NUMBER: 08/653,294

FAX/TELECOPIER NUMBER: 1-858-720-5125

COMMENTS: wo doc. WO 95/13288 pgs 1 & 12.

IF YOU HAVE NOT RECEIVED ALL THE PAGES OF THIS TRANSMISSION, PLEASE CONTACT THE ATTORNEY AT THE TELEPHONE NUMBER LISTED ABOVE.

IN COMPLIANCE WITH 1096 OG 30, THE FILING DATE ACCORDED EACH OFFICIAL FAX TRANSMISSION WILL BE DETERMINED BY THE FAX MACHINE DATE STAMP FOUND ON THE LAST PAGE OF THE TRANSMISSION, UNLESS THAT DATE IS A SATURDAY, SUNDAY, OR FEDERAL HOLIDAY WITHIN THE DISTRICT OF COLUMBIA, IN WHICH CASE THE OFFICIAL DATE OF RECEIPT WILL BE THE NEXT BUSINESS DAY.

**PCT** WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

| (51) International Patent Classification 6 : | | (11) International Publication Number: |
|---|---|---|
| C07K 1/22, 14/705, 14/725, G01N 33/566 | A1 | WO 95/13288 |
| | | (43) International Publication Date: 18 May 1995 (18.05.95) |

(21) International Application Number: PCT/US94/12985

(22) International Filing Date: 10 November 1994 (10.11.94)

(30) Priority Data:
08/150,493 10 November 1993 (10.11.93) US

(71) Applicant: THE BOARD OF TRUSTEES FOR THE LELAND STANFORD JUNIOR UNIVERSITY [US/US]; Suite 350, 900 Welch Road, Palo Alto, CA 94304 (US).

(72) Inventors: CLAYBERGER, Carol; 812 Mayfield Avenue, Stanford, CA 94305 (US). KRENSKY, Alan, M.; 812 Mayfield Avenue, Stanford, CA 94305 (US).

(74) Agents: ROWLAND, Bertram, I. et al.; Flehr, Hohbach, Test, Albritton & Herbert, Suite 3400, 4 Embarcadero Center, San Francisco, CA 94111-4187 (US).

(81) Designated States: AU, CA, JP, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published
*With international search report.*

(54) Title: SURFACE MEMBRANE PROTEINS AND THEIR EFFECT ON IMMUNE RESPONSE

(57) Abstract

p74 is a protein found in T-cells and other cells, which when bound with specific agents results in inhibition of cytolytic activity and differentiation of CTLs. p74 can be isolated from T-cells and other cells using palindromic HLA-B2702.84-75-84 peptide by affinity binding of a cell lysate.

HLA-B2702.75-84(L) RENLRILLEY

It was also found by the following assay that B2702.60-84, B38.60-84 and B2702.75-84 when pre-bound to plastic caused cells to bind. None of the other peptides were found to have this effect. However, when the B2702.60-84 peptide was conjugated to bovine serum albumin or to beads via the cysteine at residue 67, the blocking effect and the ability to bind cells to plastics were lost.

The plastic binding procedure was as follows: peptide (100 μg/ml) was dissolved in PBS and 50 μl was added to round bottom microtiter wells or 5-10 μl to petri dishes. After 60 minutes at 37°C or overnight at 4°, the solution was removed and the plates washed twice in RPMI-1640 supplemented with 10% fetal bovine serum. Cells were added and incubated at 4° for 30 minutes. Binding to petri dishes was determined by inspecting the dishes under a microscope following gentle agitation. Binding to microtiter wells was determined after centrifugation at 500 rpm for 3 minutes. Cells which did not bind formed a small pellet at the bottom of the well whereas cells that did bind did not form a pellet.

Binding occurred equally well at 4°, 25°, or 37° and was not dependent on exogenously added divalent cations since binding was observed in medium containing EDTA. However, if cells were preincubated with 1% $NaN_3$ or fixed with paraformaldehyde, no binding was observed, indicating that viable cells and most likely generation of ATP were required.

Isolation and Characterization of p74

The amino terminal amino groups of the B2702.60-84, B2702.84-75-84, B2702.84-79/79-84, B2702.84-75T/75-84T, B7.60-84, and B7.84-75/75-84 peptides were conjugated to biotin-$(CH)_{12}$-for use with strepavidin-agarose (SAA) to isolate the peptide receptor from $^{35}S$-methionine and cysteine labeled cells.

| | |
|---|---|
| HLA-B2702.60-84 | WDRETQICKAKAQTDRENLRIALRY |
| B2702 84-75-84 Palindrome | YRLAIRLNERRENLRIALRY |
| B2702 84-79-84 Palindrome | YRLAIRRIALRY |
| B2702 84-75T/75-84T Palindrome | YRLAIRLNETRENLRIALRT |
| B7.60-84 | WDRETQICKAKAQTDRESLRNLRGY |
| B7.84-75/75-84 Palindrome | YGRLNRLSERRESLRNLRGY |

Two different protocols were used. In the first, the biotinylated peptide was complexed to the SAA and allowed to bind to labeled cells at 4°C for 30 minutes. The cells were washed free of excess complex and lysed by addition of CHAPS containing lysis buffer. This method preferentially precipitates material from the cell surface. In